AMENDMENT UNDER 37 C.F.R. § 1.111 Attorney Docket No.: Q80286

Application No.: 10/800,672

## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

## LISTING OF CLAIMS:

- (currently amended): A process for producing a modified polyethylene resin, which comprises the step of melt kneading at least;
  - (A) 100 parts by weight of a polyethylene resin,
- (B) from 0.1 to 20 parts by weight of at least one compound selected from the group consisting of:
- (B1) a compound having in its molecule (i) at least one carbon-carbon double or triple bond and (ii) at least one polar group, and
- (B2) a compound having in its molecule (iii) an OR group and (iv) at least two functional groups, which functional groups are the same as or different from each other, and are selected from the group consisting of a carboxylic acid group, an acid halide group, an acid anhydride group, an acid halide anhydride group, an acid ester group, an acid amide group, an imide group, an imide group, an amino group and a salt of an amino group, wherein the R is hydrogen, an alkyl group, an aryl group, an acyl group or a carbonyldioxy group, and
- (C) from 0.01 to 20 parts by weight of an organic peroxide having a decomposition temperature of from 50 to 115 °C, at which temperature a half-life thereof is 1 minute,

wherein the melt kneading is carried out in an extruder having a first-half melt kneading zone and a latter-half melt kneading zone, and a temperature in the latter-half melt kneading zone is higher than that in the first-half melt kneading zone.

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(original): The process for producing a modified polyethylene resin according to
 Claim 1, wherein the organic peroxide (C) has the following structure (1),

in its molecule.

- (original): The process for producing a modified polyethylene resin according to
  (Claim 1, wherein the organic peroxide (C) is dicetyl peroxydicarbonate.
  - 4. (canceled).
- 5. (original): The process for producing a modified polyethylene resin according to Claim 1, wherein the compound (B1) is maleic anhydride, maleic acid, fumaric acid, itaconic anhydride, itaconic acid, glycidyl (meth)acrylate or 2-hydroxyethylmethacrylate.